# Megaplex-4

# T3

## T3 Multiplexer Module

- Single-port T3 interface module multiplexing up to 28 T1 channels
- T3 line and module protection
- DACS capabilities with cross-connect of T1 multiplexed within DS3
- Remote and local loopbacks on T3 and T1 ports

#### T3 INTERFACE

T3 is a single-port multiplexer module for Megaplex-4, providing access to standard T3 equipment over unbalanced copper lines with full duplex data rates of 44.7 Mbps, enabling easy connectivity to a T3/SONET network.

As a terminal multiplexer, the module is used as a feeder for a T3 network, or to access channelized DS3 ports of higher order switches in PDH or SONET networks. In this capacity, it grooms traffic and multiplexes T1/Fractional T1, E1/Fractional E1 and n x 64 kbps data.

The module provides the full channelization functionality of an M13 multiplexer required to multiplex and demultiplex 28 independent T1 channels into and from a single T3 interface.

#### **TIMING**

The T3 port can be used as the source clock for the system. When working with CL modules that have no SDH/SONET ports, any internal T1 port can also serve as system clock source.

## **PROTECTION**

T3 protection is ensured by installing a second module in the chassis as a standby backup.

#### **DIAGNOSTICS**

Diagnostics include local and remote loopbacks on the T3 and internal T1 ports.

#### **MANAGEMENT**

All module operating parameters are soft-selectable through the Megaplex management

## **Specifications**

#### T3 INTERFACE

## Number of Ports

1

## Compliance

ANSI T1.107 ANSI T1.102

## Data Rate

Full-duplex 44.736 Mbps

### Connector

BNC, female

#### Line Impedance

75 $\Omega$ , unbalanced

## Line Code

B3Zs

## **Pulse Shape**

ANSI T1.102\_1993, ITU-T Rec. G.703

#### Framing

M13, C-bit parity

#### Timing

System clock

## **Performance Monitoring**

RFC-3896



#### **T1 INTERFACE**

#### **Number of Ports**

28 internal ports

### Compliance

AT&T TR-62411 ANSI T1.403 ITU-T Rec. G.704

## **Data Rate**

1.544 Mbps

#### Framing

ESF, SF, Unframed

## **Timing**

System clock (when working with CL modules that have no SDH/SONET ports)

## Performance Monitoring

ANSI T1.403



# T3 Multiplexer Module

#### **GENERAL**

### Diagnostics

Remote and local loopbacks on:

- T3 ports (per port)
- T1 ports (per port and per timeslot)

## Indicators

SYNC (green/red):

- Lights in green when the port is active and operating properly
- Lights in red when the port is active and detects a LOS, LOF or AIS alarm indication
- Off: not active or not connected

REM SYNC (yellow): Lights when the port detects loss of remote synchronization

## Power Consumption (max.)

10.4W

## **Environment**

Operating temperature: -10°C to +55°C (14°F to 131°F)

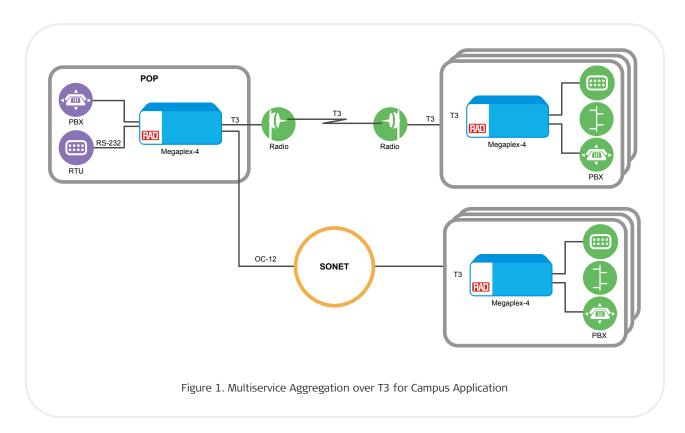
Storage temperature: -20°C to +70°C (-4°F to +160°F)

Humidity: up to 95%, non-condensing

## **Ordering**

MP-4100M-T3

T3 multiplexer module



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